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Memorandum Report on Occurence of *Matsucoccus* (Coccidae) Based on Laboratory Examination of various lots of *Pinus ponderosa* from Prescott, N.F., Arizona

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Two species of Matsucoccus were found on Pinus ponderosa from Prescott National Forest. In this report, they are designated as Matsucoccus matsumurae type and Matsucoccus n.sp.,

In M.matsumurae type, the adult females were found crawling over the host, or settled down in cracks and crevices in the bark, or under turned back scales, and when in the latter position generally were found near the tip of the twig. The intermediate forms and larvae were found in bases of the needle sheaths, on the bark underneath the needle sheaths, under bark scales, and in rough places in the bark. Immature and adult males were found crawling over the host, or settled down under turned back bark scales.

In Matsucoccus n.sp., the adult females were found only inside the intermediate stages, which with the larvae were found inside the needle sheath slightly nearer the outer than basal end of the sheath.

Lynx Creek and Copper Basin areas. Received July 15,1936.

M.matsumurae type. Adult females, dead, abundant. Old intermediate stages, and new, from which adult females emerged in 1936. abundant. Larvae, partially grown, fairly abundant.

Matsucoccus n.sp.. Old dead intermediate stages, and larvae which may be this years, very sparse.

Near Beck Ranch on the Bonnie Mine Road, Jack Orr, Coll., Aug.4,1936.

M.matsumurae type. Adult females, dead, fairly sparse. Old intermediate stages and new, from which adult females emerged in 1936, sparse on some twigs, fairly abundant on others. Young intermediate stages emerging from larval skins, fairly sparse. Larvae, apparently half to fully grown, fairly abundant.

Matsucoccus n.sp., One intermediate stage emerging from larval skin; half and fully grown larvae, very sparse.

Copper Basin Road, Jack Orr, Coll., Received Sept.10,1936.

M.matsumurae type. Adult females, dead, sparse. Intermediate stages from which adults have emerged, and young ones which have recently emerged from larval skins, fairly sparse. Larvae, fully grown, sparse.

Matsucoccus n.sp., Intermediate stages and larval skins, both stages apparently 1936 forms, very sparse.

Iron Springs district. Jack Orr, Coll., Oct.1936.

M.matsumurae type. Adult females, dead, sparse. Old intermediate stages from which adults have emerged, and young which have recently emerged from larval skins and appear half grown, fairly abundant. Larvae, fully grown and dead, or larval skins appressed to intermediate stage, sparse.

Matsucoccus n.sp.. Intermediate stages, and half and fully grown larvae, all apparently dead, sparse.

Some of the twigs in this lot appear to have been dead for some time, most of these were infested very lightly.

N.W. of Lynx Creek Camp. Jack Orr, Coll., Nov.15,1936.

M.matsumurae type. Adult females, dead, fairly sparse. Old

intermediate stages, from which adults have emerged, very sparse; new, emerged from 1936 larval skins, appearing half or more than half grown, fairly abundant. Larvae half grown and dead, fairly sparse, larval skins appressed to intermediate stages, fairly abundant. Males, emerging from second stage, and pupating, sparse.

Matsucoccus n.sp.. Intermediate stage, dead, very sparse.

Sheldon Mine vicinity on Lynx Creek Road. Dr.West, Coll., Dec.10,1936.
Selected from trees heavily infested with egg masses in May 1936.

M.matsumurae type. Adult females, dead, fairly abundant. Old intermediate stages, from which adults have emerged, fairly abundant; new, emerged from 1936 larval skins, appearing nearly, or fully grown, abundant. Larval skins appressed to intermediate stages, sparse. Adult males emerging from earlier stages, sparse.

Matsucoccus n.sp., None found.

Prescott N.F., R.M.Cleveland Coll. for Jack Orr, Jan.25,1937.

M.matsumurae type. Adult females, dead, very sparse. Intermediate stages appearing nearly or fully grown, not abundant. Larval skins appressed to intermediate stages, very sparse.

Matsucoccus n.sp.. Adult females inside intermediate stages, sparse. Intermediate stages, rather sparse. Larvae, fairly abundant. All specimens apparently dead.

Prescott N.F. Feb.1937.

M.matsumurae type. Adult females emerging from intermediate stage, rather sparse. Intermediate stages, fully grown, fairly abundant. Larval skins appressed to intermediate stage, rather sparse. Adult males, sparse.

Matsucoccus n.sp..Adult females inside intermediate stages, sparse. Intermediate stages, sparse. Larvae, abundant.

North of Lynx Creek, Jack Orr, Coll., Feb.18,1937.

M.matsumurae type. Adult females emerging form intermediate stage, sparse. Intermediate stages, fully grown, sparse. Larval skins appressed to intermediate stages, very sparse.

Matsucoccus n.sp.. One intermediate stage, very sparse.

Iron Springs area. J.C.Nave Coll., March 18,1937,

M.matsumurae type. Old intermediate stages from which adults have emerged in previous seasons, very sparse; new intermediate stages ranging from small to apparently fully grown, sparse. Larvae, fully grown, and larval skins appressed to intermediate stages. sparse.

Matsucoccus from this lot seemed to be alive, but did not appear to be developed any farther than other lots had been in the fall of 1936.

Matsucoccus n.sp.. Intermediate stages and larvae, very sparse.

Iron Springs Area. April 1937.

M.matsumurae type. Intermediate stages small and partially grown, none appearing fully grown, sparse. Larvae, fully grown, and larval skins appressed to intermediate stage, sparse.

Matsucoccus n.sp..Intermediate stages and larvae, very sparse.

Lynx Creek area. April, 1937.

M. matsumurae type. Adult females emerging form intermediate stage, or emerged and crawling over host, fairly abundant on two twigs, scarce on others. Intermediate stages, fully grown, fairly abundant on two twigs, scarce on others. Larvae fully grown, and larval skins appressed to intermediate stages, sparse.

Matsucoccus n.sp.. Interediate stages and larva, very sparse.